

## Sanitary Engineering Degrees Awarded in 1957

Institution	Doc- tor's	Mas- ter's	Bache- lor's	Institution	Doc- tor's	Mas- ter's	Bache- lor's
Alabama Polytechnic Institute		0	<sup>1</sup> 7	New York University	0	4	2
Alabama, University of		0	0	North Carolina State College	0	2	0
Arkansas, University of		2	0	North Carolina, University of		<sup>1</sup> 9	0
California Institute of Tech- nology	0	<sup>1</sup> 2	4	North Dakota, University of		2	
California, University of	2	<sup>1</sup> 14	3	Northeastern University		0	
Case Institute of Technology	0	1		Northwestern Technological Institute	0	<sup>1</sup> 5	5
Cincinnati, University of	0	0	0	Ohio State University	0	3	1
Colorado, University of		0	5	Oklahoma State University		0	2
Connecticut, University of	0	0		Oklahoma, University of	0	<sup>1</sup> 6	0
Cornell University	0	1		Oregon State College	0	1	
Florida, University of	0	1	4	Pennsylvania State Univer- sity	0	2	3
Georgia Institute of Tech- nology	0	2	10	Purdue University	<sup>1</sup> 2	4	1
Harvard University	1	<sup>1</sup> 11		Rensselaer Polytechnic Insti- tute		0	3
Idaho, University of		0		Rutgers University	0	0	1
Illinois Institute of Technology		0	0	South Dakota State College		0	3
Illinois, University of	0	8	6	Southern California, Univer- sity of		1	
Iowa State College	0	1	1	Southern Methodist Univer- sity		2	
Iowa, State University of	0	1	6	Tennessee, University of		2	
Johns Hopkins University	2	<sup>1</sup> 8	0	Texas, Agricultural and Me- chanical College of	0	<sup>1</sup> 2	
Kansas, University of		0	<sup>1</sup> 5	Texas Technological College		0	3
Kentucky, University of		0		Texas, University of	1	<sup>1</sup> 5	
Maine, University of		0	5	Tulane University of Louisi- ana		2	1
Manhattan College			19	Utah, University of		1	0
Massachusetts Institute of Technology	3	<sup>1</sup> 15		Virginia Polytechnic Institute	0	1	1
Massachusetts, University of		0		Washington, State College of	0	1	0
Michigan College of Mining and Technology		0	<sup>1</sup> 11	Washington University		<sup>1</sup> 4	
Michigan State University	0	4		Washington, University of		3	0
Michigan, University of	0	5	1	West Virginia University		0	2
Minnesota, University of	0	<sup>1</sup> 4		Wisconsin, University of	0	5	
Mississippi State College		0	<sup>1</sup> 19	Wyoming, University of		0	
Missouri School of Mines and Metallurgy		1	3				
Missouri, University of		<sup>1</sup> 2	1				
Nebraska, University of		0	0				
Newark College of Engineering	0	2	7				
New Hampshire, University of		0					
				Total	11	152	145

<sup>1</sup> Includes foreign nationals. Leaders (----) indicate no specialization offered at this level.

During the period of July 1956 through June 1957, graduate degrees in sanitary engineering were conferred on 163 individuals by institutions in the United States: 152 master's

degrees and 11 doctor's degrees. In the same period, 145 students completed undergraduate programs specializing in sanitary engineering.

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The tabulation above shows the institutions in the United States awarding sanitary engineering degrees and the number and level of the degrees conferred, irrespective of the nomenclature of the degree. The totals are those reported by the institutions. A list of all schools offering such training is available from the authors. Similar data for the period since

## Engineering degrees awarded annually, by type of degree, 1951-57

Year	Number sanitary engineering degrees	Schools awarding sanitary engineering degrees	Schools offering sanitary engineering curriculums	Total number engineering degrees <sup>1</sup>	Number sanitary engineers per 1,000 engineering degrees
<b>Bachelor's degrees</b>					
1957-----	145	31	43	27,748	5.2
1956-----	208	32	53	23,547	8.8
1955-----	141	32	44	20,200	7.0
1954-----	164	32	40	19,707	8.3
1953-----	216	36	41	21,642	10.0
1952-----	216	36	41	27,155	8.0
1951-----	244	35	39	37,904	6.4
<b>Master's degrees</b>					
1957-----	152 (39)	41	64	5,203	29.2
1956-----	124 (31)	33	67	4,678	26.5
1955-----	134 (34)	33	53	4,444	30.2
1954-----	120 (25)	30	56	4,130	29.1
1953-----	102 (20)	25	57	3,726	27.4
1952-----	105 (22)	29	57	4,132	25.4
1951-----	152	26	57	5,134	29.6
<b>Doctor's degrees</b>					
1957-----	11 (1)	6	32	596	18.5
1956-----	9 (1)	7	27	610	14.8
1955-----	11 (2)	4	28	599	18.4
1954-----	9	5	26	590	15.3
1953-----	5	4	24	592	8.4
1952-----	9	5	23	586	15.4
1951-----	7	4	25	586	11.9

<sup>1</sup> See Armore, S. J., and Armsby, H. H.: Engineering enrollments and degrees in ECPD-accredited institutions: 1957. *Journal of Engineering Education*, vol. 48, No. 6, February 15, 1958, pp. 415-432.

NOTE: Figures in parentheses represent nationals of other countries included in larger figure.

1889 appear in the literature (1-4) or have been distributed by the Public Health Service.

Comparative data on the conferment of degrees for the years 1951-57 are given in the tabulation above.

### Undergraduate Degrees

Forty-three institutions offered a program in sanitary engineering during the academic year 1956-57. Of these schools, 31 reported 145 graduates had received undergraduate training toward the bachelor's degree in sanitary engineering or had a sanitary engineering major or option. The average number of graduates per

year for the 10-year period 1947-56 was 200 and for the 5-year period 1952-56, 189.

### Master's Degrees

Of the 64 colleges and universities offering graduate training in sanitary engineering, 23 schools, or 36 percent, reported no graduates. The remaining 41 schools awarded 113 degrees to United States citizens and 39 degrees to foreign nationals.

The bulk of training in 1957 was done by 16 schools. These schools trained 111 students and had 4 or more graduates per school. Of these 16 schools, 7 have averaged over 5 mas-

ter's degrees per year for the 10 years 1948-57. The average number of master's degrees conferred per year for the 10-year period 1947-56 was 133, and for the 5-year period 1952-56, 117.

### Doctor's Degrees

Six institutions in 1957 awarded a total of 11 doctor's degrees, conferring 10 on United States citizens. Twenty-six other institutions offering sanitary engineering training at the doctorate level reported no doctor's degrees awarded.

Three of these 6 schools have awarded one or more doctor's degrees each year for the past 5 years and during that period have accounted for over 60 percent of the doctorates in sanitary engineering. For the 10-year period 1947-56,

the average number of doctor's degrees per year was 6.3, and the average for the 5 years 1952-56 was 8.6 degrees.

### REFERENCES

- (1) Miller, A. P.: Graduates from undergraduate sanitary engineering courses in the United States. Pub. Health Rep. 66: 369-374, Mar. 23, 1951.
- (2) Miller, A. P.: Sanitary engineering degrees given in 1954. Pub. Health Rep. 70: 1039-1040, October 1955.
- (3) Laubusch, E. J., and Ludwig, H. F.: Sanitary engineering degrees awarded in 1955. Pub. Health Rep. 71: 945-946, September 1956.
- (4) Erickson, F. K., and Butrico, F. A.: Sanitary engineering graduate degrees awarded in 1956. Pub. Health Rep. 72: 1130-1131, December 1957.

## Division of Public Health Nursing

A Division of Public Health Nursing has been established in the Bureau of State Services.

The new division, as a focal point for public health nursing in the Public Health Service and through its consultative services, provides leadership in extending and improving public health nursing services in order to implement public health programs and to plan for the nursing care of ill and disabled persons who are at home.

Through its working relationships with State and national groups it represents the Public Health Service in the development of public health nursing standards of preparation and practice.

The Division of Public Health Nursing staff arranges for assigning public health nurses to educational institutions and field agencies for career development purposes and gives professional guidance to public health nurses assigned to the various programs within the Public Health Service. It conducts research in relation to public health nursing practice and advises on studies conducted by State and local agencies.

Officials of the Division of Public Health Nursing are Margaret G. Arnstein, chief; Zella Bryant, deputy chief; Frances E. Taylor, chief of Training and Career Development Branch; Doris E. Roberts, chief of the Operational Research Branch; Dr. Marion Ferguson, consultant in studies; and Mary Vesta Marston, consultant in operational research.